



**Figure IV-3-25. Shinnecock Bay, Long Island, New York, 30 June 1938. Photograph taken before the Great New England Hurricane of 21 September cut the barrier island in several locations. The present Shinnecock Inlet was cut where a channel crosses from the bay to the road. The channel may be a remnant of an artificial cut that was dug by the Shinnecock and Peconic Canal Company in 1896. Shoal areas in the bay near the barrier attest to former inlets that had been open long enough to form flood shoals. North is to the top, the water body in the center of the image is Shinnecock Bay, and the Atlantic Ocean is on the bottom. The image is part of a mosaic prepared by the Beach Erosion Board**

east, leaving the bulkhead behind a sand beach (Figure IV-3-28). A spit extended out to sea from the west shore, suggesting that longshore transport, at least temporarily, had been to the east (possibly a local reversal). Some small shoals existed in the mouth of the inlet, but sediment transport was largely directed into the bay after 1938. The ebb shoal was a flat oval that hugged the shore. The shoreline in this area trends about  $65^\circ$  (approx NE-SW). The 1947 channel extended out to sea at about  $120^\circ$ , more eastward than perpendicular to the shore. In the following years, the inlet rotated clockwise, until by 1951, the channel was pushing up against the bulkhead and the flood shoal deposition was occurring east of its earlier location.

(3) Stabilized inlet (1996). East and west jetties were built in 1952-54 by Suffolk County and the State of New York and rebuilt in 1992-93 by the Corps of Engineers. A photograph from 24 October 1996 (Figure IV-3-29) shows that the channel inlet was aligned north-south, about  $40^\circ$  clockwise from the orientation in 1947. The jetties were 240 m (800 ft) apart. The updrift beach had advanced almost to the tip of the east jetty. During the 1970's and 1980's, the bay shoreline east of the inlet eroded about 500 ft (150 m) due to scour from the east ebb channel. To the west, the shore has suffered chronic erosion, requiring frequent emergency repair by the highway department to prevent the road from being breached. The ebb shoal (only partially shown in this photograph) is an unsymmetric oval that attaches to the downdrift beach about 1,200 m west of the west jetty.